

REMARKS**a). Description Of Amendments**

Applicants' attorney thanks the Examiner for her comments. Claims 1, 2, 4-21 and 23-31 are pending in this patent application. Claims 3, 22 and 32-41 have been cancelled.

Independent Claim 1 has been amended to recite a method for producing a structured composite material having a plurality of apertures *for accommodating passage of fluids through the structured composite material.*

Independent Claim 1 has been further amended to recite the step of *extruding a second layer onto the first layer.* This amendment is fully supported throughout Applicants' specification, for example at page 17, lines 21-22.

Claim 24 has been amended in independent form to include all of the limitations of original independent Claim 22, with the exception that Applicants have clarified the step of forming a heterogeneous material "by combining the first homogeneous component and the second *homogeneous* component," as suggested by the Examiner in reference to original Claim 22. Applicants have also amended Claims 23 and 25-28 to depend from and further limit amended Claim 24.

Independent Claim 29 has been amended to recite the steps of: forming the heterogeneous material by combining a first homogeneous component with a first shrinkage extent and a second homogeneous component with a second shrinkage extent different from the first shrinkage extent; applying a plurality of slits through the heterogeneous material; and heating the heterogeneous material to shrink at least one of the first homogeneous component and the second homogeneous component to produce the structure, whereby each slit opens to form an aperture.

b). Request For Telephone Interview

Applicants' undersigned attorney requests a telephone interview with the Examiner. The undersigned requests this interview if the amendments and arguments are not deemed sufficient to place the application in condition for allowance. If the Examiner feels the claims are not allowable for any reason, then please telephone the undersigned, Eric T. Krischke, at 847-490-1400.

c). Response To Claim Rejections

The Examiner rejected Claims 22-28 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. This rejection is respectfully traversed particularly in view of the above Amendment and the following remarks.

Applicants have amended Claim 24 in independent form to include all of the limitations of original independent Claim 22, with the exception that Applicants have clarified the step of forming a heterogeneous material "by combining the first homogeneous component and the second *homogeneous* component," as suggested by the Examiner in reference to original Claim 22. Accordingly, Applicants have cancelled original Claim 22. Applicants have also amended Claims 23 and 25-28 to depend from and further limit amended Claim 24.

Thus, Applicants respectfully request withdrawal of this rejection.

The Examiner rejected Claims 1, 2, 5, 7, 8, 12, 14, 16 and 18-21 under 35 U.S.C. § 102(b) as anticipated by UK Patent Application 2,284,786 ("Zelazoski et al."). This rejection is respectfully traversed particularly in view of the above Amendment and the following remarks.

Zelazoski et al. discloses a method for forming a quilted film laminate involving the placing of a slit film layer in a generally face-to-face relationship with a

substrate layer and then bonding the film layer to the substrate layer to form a composite. At least one of the film layer and the substrate layer retracts after the layers are bonded together to form puckers in the film layer. The puckers in the film layer can be formed by stretching one or both of the layers or using heat-shrinkable materials. See Zelazoski et al. at page 4, lines 3-12.

Zelazoski et al. does not describe a method for producing a structured composite material having a plurality of apertures for accommodating passage of fluids through the structured composite material, wherein a second layer having a second shrinkage extent different from the first shrinkage extent is extruded onto the first layer and a plurality of apertures are formed through the second layer, as required by Applicants' claimed invention. Rather, Zelazoski et al. describes bonding a slit film layer with a substrate layer to form a composite and retracting at least one of the film layer and the substrate layer after the layers are bonded together to form puckers in the film layer.

For these reasons, Applicants submit that Claims 1, 2, 5, 7, 8 and 17-21 are patentable over Zelazoski et al.

The Examiner rejected Claims 1, 5, 7, 8 and 17-21 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent 5,814,178 ("Jacobs"). This rejection is respectfully traversed particularly in view of the above Amendment and the following remarks.

Jacobs discloses a laminate comprising a breathable liquid resistant layer. The breathable liquid resistant layer comprises a film containing evenly distributed micropores that are large enough to pass water vapor through the pores but small and tortuous enough to prevent liquid, and desirably also prevent microbes, from flowing therethrough. See Jacobs at Col. 7, lines 50-62. The laminate is highly useful for various applications where liquid resistance is required, such as protective gowns and personal care article outer covers. See Jacobs at Col. 9, lines 37-43.

Jacobs does not describe a method for forming a structured composite material having a plurality of apertures *for accommodating passage of fluids through the structured composite material*, as required by Applicants' claimed invention, particularly high viscosity fluids such as menses, runny bowel movements, wound exudate and blood.

As set forth in Applicants' specification, for example at page 18, line 20 through page 19, line 2, Applicants' invention provides an apertured structured material for incorporation into a personal care absorbent article suitable for runny bowel movement separation and containment and menses management and containment. The second layer includes apertures which extend through the second layer to permit passage of high viscosity fluids through the second layer. Desirably, the structure produced during the differential shrinkage process forms a frusto-conical shape around each aperture to direct fluid flow through the second layer, thus preventing rewet or fluid flow back through the second layer. Unlike Applicants' claimed invention, Jacobs discloses a laminate suitable, for example, as an outer cover for a personal care absorbent article to prevent fluid from passing through the outer cover.

For these reasons, Applicants submit that Claims 1, 5, 7, 8 and 17-21 are patentable over Jacobs.

The Examiner rejected Claim 22 under 35 U.S.C. § 102(b) as anticipated by European Patent Application 687,757 ("Srinivasan"). This rejection is respectfully traversed particularly in view of the above Amendment and the following remarks.

Applicants have cancelled Claim 22. Applicants have amended Claim 24 in independent form to overcome the rejections under 35 U.S.C. § 112, second paragraph, and to include all of the limitations of base Claim 22, as suggested by the Examiner. The Examiner has indicated that Claims 24-26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, and

to include all of the limitations of the base claim and any intervening claims. Thus, Applicants respectfully request withdrawal of this rejection.

The Examiner rejected Claims 29-31 under 35 U.S.C. § 103(a) as obvious over GB Patent 1,293,456 (“Breveteam”). This rejection is respectfully traversed particularly in view of the above Amendment and the following remarks.

Breveteam discloses a process for producing a reticulated sheet wherein slits are formed in the sheet and the sheet is heated to effect shrinking of the material between the slits to a thickened form and formation of net-like openings in the sheet.

Applicants have amended independent Claim 29 to recite the steps of: forming the heterogeneous material by combining a first homogeneous component with a first shrinkage extent and a second homogeneous component with a second shrinkage extent different from the first shrinkage extent; applying a plurality of slits through the heterogeneous material; and heating the heterogeneous material to shrink at least one of the first homogeneous component and the second homogeneous component to produce the structure, whereby each slit opens to form an aperture.

As suggested by the Examiner at paragraph 16 of the Office Action, the prior art, including Breveteam, fails to teach or suggest a method for making a heterogeneous material for accommodating the passage of fluids by combining a first homogeneous component having a first shrinkage extent and a second homogeneous component having a second shrinkage extent different from the first shrinkage extent to form the heterogeneous material; forming a plurality of slits through the heterogeneous material; and heating the heterogeneous material to shrink at least one of the first homogeneous component and the second homogeneous component, whereby each slit opens to form an aperture, as required by amended Claim 29.

Thus, Applicants respectfully request withdrawal of this rejection.

The Examiner rejected Claims 3 and 6 under 35 U.S.C. § 103(a) as obvious over Zelazoski et al. in view of Breveteam. This rejection is respectfully traversed particularly in view of the above Amendment and the following remarks.

Applicants have cancelled Claim 3. Claim 6 depends from Claim 1, and is patentable for at least the same reasons presented above. Contrary to Applicants' claimed invention, Zelazoski et al. does not teach or suggest extruding a second layer having a second shrinkage extent different from the first shrinkage extent onto the first layer and subsequently forming a plurality of apertures in the second layer. In fact, Zelazoski et al. teaches away from forming apertures in the second layer subsequent to extruding the second layer onto the first layer in that Zelazoski et al. teaches bonding a slit film layer to a substrate layer. As discussed above, Breveteam does not overcome the deficiencies of Zelazoski et al. Breveteam is concerned mainly with providing network structures for packaging and transporting purposes. See Breveteam at page 1, lines 8-11. Breveteam is not concerned with structured composite materials having apertures for accommodating passage of fluids through the structured composite material. Further, Breveteam does not teach or suggest *extruding a second layer onto the first layer*, the second layer having a second shrinkage extent different from the first shrinkage extent, as required by Applicants' claimed invention.

The Examiner rejected Claims 9-11 and 13 under 35 U.S.C. § 103(a) as obvious over Zelazoski et al. This rejection is respectfully traversed particularly in view of the Amendment and remarks above. Claims 9-11 and 13 depend from Claim 1, and are patentable for at least the same reasons.

The Examiner rejected Claim 17 under 35 U.S.C. § 103(a) as obvious over Zelazoski et al. in view of Jacobs. This rejection is respectfully traversed particularly in view of the above Amendment and the following remarks. Claim 17 depends from Claim 1, and is patentable for at least the same reasons. Further, Jacobs does not describe a method for forming a structured composite material having a

plurality of apertures *for accommodating passage of fluids through the structured composite material*, as required by Applicants' claimed invention. In fact, Jacobs teaches away from the present invention. Unlike Applicants' claimed invention, Jacobs describes a breathable liquid resistant layer comprising a film containing micropores that are large enough to pass water vapor through the pores but small and tortuous enough to prevent liquid and microbes from flowing therethrough.

The Examiner rejected Claims 2, 9-14 and 16 under 35 U.S.C. § 103(a) as obvious over Jacobs in view of Zelazoski et al. This rejection is respectfully traversed particularly in view of the Amendment and remarks above. Claims 2, 9-14 and 16 depend from Claim 1, and are patentable for at least the same reasons. Jacobs, alone or in combination with Zelazoski et al., does not teach or suggest Applicants' invention as claimed in independent Claim 1.

The Examiner rejected Claims 3 and 6 under 35 U.S.C. § 103(a) as obvious over Jacobs in view of Breveteam. This rejection is respectfully traversed particularly in view of the Amendment and remarks above. Applicants have cancelled Claim 3. Claim 6 depends from Claim 1, and is patentable for at least the same reasons.

The Examiner rejected Claims 23 and 27-28 under 35 U.S.C. § 103(a) as obvious over Srinivasan et al. This rejection is respectfully traversed particularly in view of the above Amendment and the following remarks. Claims 23, 27 and 28 have been amended to depend from and further limit amended Claim 24, which Applicants believe is patentable for at least the reasons presented above.

d). Allowable Subject Matter

The Examiner has indicated that Claims 24-26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, and to include all of the limitations of the base claims and any intervening claims. Applicants have amended Claim 24, as suggested by the Examiner. Accordingly,

Applicants have cancelled original Claim 22 and amended original Claims 23 and 25-28 to depend from and further limit amended Claim 24.

Applicants believe that the claims, as now presented, are in condition for allowance. Again, Applicants' attorney thanks the Examiner for her careful consideration of the claimed invention and prior art.

Respectfully submitted,



Eric T. Krischke
Registration No. 42,769

Pauley Petersen Kinne & Erickson
2800 West Higgins Road
Suite 365
Hoffman Estates, Illinois 60195
TEL (847) 490-1400
FAX (847) 490-1403